FAI 55 Interstate 55

Project Report & Appendix A

FAI 55 (I-55 & I-55 Frontage Road) Section (84-5-2)B-2,B-3,ACB,R Sangamon County

D-96-532-03 Contract #72803

I-55 & West Frontage Road over Brush Creek - 0.7 Miles South of IL 104

Project Engineer(s) / Squad Leaders:

Sal Madonia / Jeff Myers

Consultant Firm / Project Manager:

Horner & Shifrin, Inc. / Steve Donahue

PIPE DRAINS (PER STD

June 2005





ILLINOIS DEPARTMENT OF TRANSPORTATION

Key Rou F.A. Rou Section: Job Nur Location	ute: nber:	D-96-532	3-2,B- 2-03	3,ACB,R ver Brush	Mar Proj Con	S No.: rked Ro ject Le ntract N ek app	ngth: No.:	6-0020 Interst 0.78 m 72803 nately 0.7	ate 55 i.	Pro	unty: ogram			ngamon nterchange
General	Descript	ion of Exi	sting F	acility: (se	e Sh	neet Ne	o. 1)							
				ne intersta been over										e past, the ne interstate.
Design I	Policies L	Jsed: 🗌] New	t: (see She Construction I Improvem	on	⊠Ŕ		truction No. 6)	☐ 3R] Othe	er		
profile (lanes w Road be a reloca	The proposed project includes the replacement the structures over Brush Creek including raising the profile grade of I-55 to prevent future overtopping of the interstate. The proposed structures will be 3 lanes wide and the interstate pavement constructed 3 lanes wide in each direction. The West Frontage Road bridge over Brush Creek will be removed and access to properties north of Brush Creek will be via a relocated West Frontage Road that will connect to IL 104 just east of the crossing of the Canadian National Railroad.													
Approxi	mate Amo	ount of Ro	DW to	be Purcha	sed:									
3 Pa	rcels Tot	aling 4	.22	Acres (Hed	ctare	es).								
Number	of Busine	esses	0	and Resi	dend	ces	0	to be acc	quired.					
Constru	ed Prograction Coselocation	st:	\$9 ,),401,829.8 001,829.80),000	ı	(in FY ROW (Consul		2009 P.E. Cost:	Dollar \$350 , \$1,00	000		Type:	IN	Λ
				cal agency utes from d										NO NO
•	Level Tw	ns: e Require o Require te date ap	ed?	ed:								YES YES	_	NO ⊠ NO ⊠
•	Public He Informati	volvemen earing Off onal Mee Owners (ered? ting He	eld?								YES YES YES		NO ⊠ NO ⊠ NO □
	Categorio	cal Exclus	ion Ce	ertification S	State	ement	(Grou	p I):						
	"This project is of a type which qualifies as a Categorical Exclusion Action. It has been determined not to involve any Potential for Unusual Circumstances. Therefore, it is eligible to be processed as a Group I Categorical Exclusion."													
\boxtimes	Categorio	cal Exclus	ion Ce	ertification \$	State	ement	(Grou	p II):						
	"It has been determined this project will involve one or more of the factors indicating a Potential for Unusual Circumstances. Group II Categorical Exclusion concurrence for this project was obtained from the FHWA on May 26, 2005. Documentation of the concurrence is attached."													
District I	Design Aր cable)	oproval					DOT F	Regional E	Engineer	•				Date
BDE De	sign App cable)	roval				E	Bureau	of Desig	n & Envi	ronr	nent			Date

HAZARDOUS/TOXIC

sites in Illinois has t site(s). As a result	of potential, suspected, and known hazardous waste or hazardous substance been reviewed to ascertain whether the proposed project will involve any listed of this review, it has been determined that the proposed undertaking will not easement from any site included in the CERCLIS list dated or LUST list dated 02/18/2004
	roject has been determined by the District to have a no to low risk of involvement azardous/toxic waste and no further surveys are required.
	roject has been surveyed by the Illinois State Geological Survey and it is their nination the project has arisk of hazardous/toxic waste involvement.
Determination Dat	e: <u>02/18/2004</u>
COMMITMENTS:	

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DOCUMENTATION/CORRESPONDENCE

SIGN-OFFS	<u>Applicabl</u>	Not l <u>e Applicable</u>	Refer to Appendix
U.S. ARMY CORPS OF ENGINEERS	X		
Nationwide Permit	X		
Individual 404 Permit		X	
U.S. COAST GUARD		X	
F.A.A. CLEARANCE		X	
WETLAND STUDY REPORT/COORDINATION		X	
U.S. Army Corps of Engineers		X	
IL Dept. of Natural Resources		X	
U.S. Dept. of Interior/Fish & Wildlife Service		X	
U.S. Environmental Protection Agency		X	
BIOLOGICAL SURVEY/ASSESSMENT		X	A-7
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PRIME FARMLAND/AGRICULTURE		X	
U.S. Department of Agriculture/ Soil Conservation Service		X	
IL Department of Agriculture		X	
STATE FORESTER		X	
LOCAL AGENCY INVOLVEMENT/PARTICIPATION		X	
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	Negotia	ated Agreement Applies	Sign-Off Required
Historic/Architectural/Archaeological	_		
State Historic Preservation Officer Illinois Archaeological Survey			Refer to Appendix

DOCUMENTATION/CORRESPONDENCE

A-95 REVIEW			
METRO CLEARINGHOUSE	Applicable X	Not Applicable	_
Requested 7/14/04		_	
Received <u>8/20/04</u>		_	
Refer to Appendix <u>A-9</u>	-		
STATE CLEARINGHOUSE	Applicable X	Not Applicable	_
Requested 7/14/04		_	
Received <u>10/1/04</u>		<u> </u>	
Refer to Appendix <u>A-9</u>	-		
PUBLIC PARTICIPATION			
	<u>Applicable</u>	Not Applicable	Refer to Appendix
Coordination	X		A-9
Public Meeting Date(s)		X	
Public Hearing Date(s)		X	

GENERAL DESCRIPTION OF EXISTING FACILITY

This section of Interstate 55, constructed in 1972, is a four lane divided highway with 12' lanes and 6' (LT), 10' (RT) stabilized shoulders. The interstate crosses Brush Creek at this location with two separate bridge structures; NB SN 084-0107 and SB SN 084-0108 (See Structures/Grade Separations Section). West Frontage Road runs adjacent to I-55 in this section and crosses Brush Creek with a single span structure; SN 084-0002.

NEED FOR PROPOSED IMPROVEMENT

Interstate 55 and the West Frontage Road structures over Brush Creek have experienced significant overtopping flow resulting in closure of the interstate twice since the spring of 2001. On June 6, 2001, approximately 18 to 24 inches of water overtopped the roadways. On May 13, 2002, approximately 10 inches of water overtopped the roadways.

Both of these overtopping events resulted in temporary closure of Interstate 55 causing motorist delay and an adverse travel distance of around 29 miles to detour around the overtopped structures.

Interstate 55 is part of the National Highway System (NHS). NHS roadways by definition are essential for international, interstate, and regional commerce and travel, national defense, and the transfer of people and goods to and from major intermodal facilities.

Interstate 55 is also part of the Strategic Highway Network (STRAHNET). These highways are important to the United States' strategic defense policy and provide defense access, continuity, and emergency capabilities for defense purposes.

With Interstate 55 having the functional responsibilities mandated by the NHS and STRAHNET designations, it is critical that the cause of the overtopping and resulting closure of the highway be corrected so that the overtopping event does not occur in the future.

ALTERNATIVES DEVELOPED

Three interstate alternatives and two West Frontage Road alternatives were developed. One interstate alternative is to be combined with one West Frontage Road alternative (i.e. 1A, 1B, 2A, etc). They are summarized below and detailed in the following pages. Note that a full cost estimate was only performed for the preferred alternative as most alternatives were removed from consideration before full details were developed. Comparison of cost was performed based on comparing the increase or decrease in pavement and structure required.

Interstate Alternatives

Alternative 1: Construct two 2-lane I-55 bridges with a 4-lane I-55 roadway Alternative 2: Construct two 3-lane I-55 bridges with a 4-lane I-55 roadway Alternative 3: Construct two 3-lane I-55 bridges with a 6-lane I-55 roadway

West Frontage Road Alternatives

Alternative A: Replace the existing West Frontage Road bridge

Alternative B: Remove the West Frontage Road bridge and extend the West Frontage Road north to

connect with IL 104.

Interstate 55 Alternative 1: Construct 2-lane I-55 bridges with a 4-lane I-55 roadway

<u>Alternative Description</u>

This alternative would consist of removing the 2-lane I-55 bridges and replacing them with comparable 2-lane structures built at a higher elevation to correct the hydraulic deficiencies. The I-55 pavement adjacent to the new structures would be removed and reconstructed as a 4-lane facility at the higher elevation. One of the West Frontage Road alternatives would also be constructed along with this alternative.

Advantages of this Alternative

This alternative would have the lowest construction cost of the I-55 options and still address the hydraulic deficiency in this location.

Disadvantages of this Alternative

This alternative would not allow for the addition of future lanes. There is a 3-lane section just north of the project location. In the event that three traffic lanes are warranted in the future, additional lanes would have to be constructed and the bridges would have to be widened or replaced.

Maintenance of Traffic Impacts

Refer to Appendix A-6 for a detailed Maintenance of Traffic narrative.

Alternative #1 was removed from further consideration since the new structures would require modification or replacement if future traffic demands require three traffic lanes. It also requires more temporary pavement to maintain traffic than the preferred alternative.

Interstate 55 Alternative 2: Construct 3-lane I-55 bridges with a 4-lane I-55 roadway

Alternative Description

This alternative would consist of removing the 2-lane I-55 bridges and replacing them with 3-lane structures built at a higher elevation to correct the hydraulic deficiencies. The I-55 pavement adjacent to the new structures would be removed and reconstructed as a 4-lane facility at the higher elevation. One of the West Frontage Road alternatives would be constructed along with this alternative.

Advantages of this Alternative

By constructing the pair of 3-lane structures, the option to extend the 3-lane section of interstate that terminates just north of the project location will be more easily accomplished than Alternative 1, but will require construction of additional lanes on I-55. This alternative will also require more temporary pavement than the preferred alternative.

Disadvantages of this Alternative

This option will cost more than Alternative 1 for the same immediate end result (2-lane roadway and two lanes open on bridge).

Maintenance of Traffic Impacts

Refer to Appendix A-6 for a detailed Maintenance of Traffic narrative.

Alternative #2 was removed from further consideration since a new lane on both approaches would need to be added to match both 3-lane bridges if future traffic demands required three lanes for the entire area.

Interstate 55 Alternative 3: Construct 3-lane I-55 bridges with a 6-lane I-55 roadway

<u>Alternative Description</u>

This alternative would consist of removing the 2-lane I-55 bridges and replacing them with 3-lane structures built at a higher elevation to correct the hydraulic deficiencies. The I-55 pavement adjacent to the new structures would be removed and reconstructed as a 6-lane facility at the higher elevation. The 6-lane facility that currently ends just south of the IL 104 interchange would be extended to a point south of the new I-55 structures over Brush Creek. One of the West Frontage Road alternatives would also be constructed along with this alternative.

Advantages of this Alternative

This alternative would increase the capacity of Interstate 55 from the IL 104 interchange to the end of the proposed 6-lane facility. Maintenance of traffic while building this alternative would be easier as permanent pavement would be used to maintain traffic requiring less temporary pavement than Alternatives 1 & 2.

Disadvantages of this Alternative

This alternative would have the highest initial construction cost of all Interstate 55 Alternatives.

Maintenance of Traffic Impacts

Refer to Appendix A-6 for a detailed Maintenance of Traffic narrative.

Alternative #3 is recommended since the three lanes of roadway and bridges on both approaches will not require modifications to meet the future demands of the interstate. The newly constructed permanent pavement will be utilized for maintenance of traffic purposes instead of using temporary pavement that has to be removed after construction as in Alternatives 1 & 2.

West Frontage Road Alternative A: Replace the existing West Frontage Road bridge

Alternative Description

This alternative would be used in conjunction with one of the Interstate 55 Alternatives. This alternative would consist of removing the West Frontage Road bridge and replacing it with a comparable structure at a higher elevation to correct the hydraulic deficiencies.

Advantages of this Alternative

This alternative would utilize the existing right of way as well as some of the existing pavement. However, new pavement would be needed to complete the change in the profile. This alternative would not require the travel patterns of the adjacent property owners to change.

Disadvantages of this Alternative

This alternative has the higher construction cost of the two alternatives for the West Frontage Road. An additional structure would have to be maintained by the Department, including debris removal and scour protection on Brush Creek.

Maintenance of Traffic Impacts

This alternative would require the use of a temporary structure to convey traffic over Brush Creek during construction of the replacement structure. Raising the profile and increasing the bridge length would preclude the use of stage construction to construct the replacement bridge.

Refer to Appendix A-6 for a detailed Maintenance of Traffic narrative.

Alternative A was removed from further consideration since the replacement bridge would be more expensive than removing the structure in Alternative B. It also creates an additional structure to be maintained by the Department, including debris removal and scour protection.

Impacts to Access

This alternative would maintain existing access routes. There would be temporary inconvenience to the properties on the north side of Brush Creek during the construction of the replacement bridge on the West Frontage Road.

West Frontage Road Alternative B: Remove the West Frontage Road bridge and extend the West Frontage Road north to connect with IL 104.

<u>Alternative Description</u>

This alternative would be used in conjunction with one of the Interstate 55 Alternatives. This alternative would consist of removing the West Frontage Road bridge without constructing a replacement structure. The West Frontage Road would be extended from its current termination point north of Brush Creek to connect with IL 104 west of the IL 104 / I-55 interchange.

Advantages of this Alternative

This alternative would have the lower construction cost of the West Frontage Road alternatives as construction of a bridge would not be required. This alternative would not require the use of a temporary structure to maintain access to the properties north of Brush Creek. It would also eliminate a structure to be maintained by the Department.

Disadvantages of this Alternative

This alternative would require the purchase of right of way for the extension of the West Frontage Road. This option would require a change in the traffic patterns of the users of the properties north of Brush Creek. Instead of accessing their properties from south of Brush Creek, they would have access off of IL 104 using the relocated West Frontage Road.

Maintenance of Traffic Impacts

This alternative would require the relocated section of the West Frontage Road to be constructed before any work could be done on the existing frontage road structure. Since the traffic would be rerouted and off of the existing West Frontage Road bridge, the existing West Frontage Road bridge could be used to maintain interstate traffic.

Refer to Appendix A-6 for a detailed Maintenance of Traffic narrative.

Impacts to Access

This alternative will change the access route to the properties on the north side of Brush Creek. Access to I-55 from the properties on the north side of Brush Creek would be shorter.

Railroad Crossing & Impacts

While this option does not require an at grade railroad crossing to be constructed, there will be impacts to the properties north of Brush Creek. Access to these properties from either direction on IL 104 will require the traveler to cross over at least one at-grade crossing.

Alternative B is recommended since it is less expensive than replacing the bridge and the effects are minimal to surrounding property owners. The bridge removal will impact four properties and access will be slightly inconvenient.

Comparison of the Alternatives and Preferred Alternative Selection

Taking the preceding into consideration, the preferred design alternative is Alternative 3B (Interstate Alternative 3 + West Frontage Road Alternative B), the extension of the 3-lane section over twin 3-lane bridges with the relocated West Frontage Road.

Alternatives 1 & 2, while providing a lower initial cost will require subsequent modifications should Interstate 55 be expanded to six lanes in the future. More temporary pavement will be required for maintenance of traffic purposes. Alternative 3, while more expensive than Alternatives 1 & 2 will make better use of funds by constructing permanent lanes to accommodate traffic instead of temporary pavement that will be removed after construction.

Alternative 3B will accommodate two lanes of interstate traffic at all times during construction using the West Frontage Road temporarily for southbound I-55 traffic.

Alternative 3B will result in one less structure for the Department to maintain, whereas Alternative A would require that the West Frontage Road bridge remains.

DESCRIPTION OF PROPOSED IMPROVEMENT

The proposed project is located 0.7 miles south of the I-55/IL 104 interchange in Sangamon County.

The bridges over I-55 will be rebuilt three lanes wide on a raised profile and the I-55 pavement will be reconstructed three lanes wide in each direction to a point south of the bridges over Brush Creek where they will transition to two lanes in each direction.

The West Frontage Road bridge over Brush Creek will be removed. Access to the properties on the north side of Brush Creek will be maintained via a relocated West Frontage Road that will connect to IL 104.

Maintenance of traffic during the construction of the project will provide two lanes of interstate traffic in both directions at all times using the existing West Frontage Road bridge before its removal.

EXISTING/PROPOSED COMPARISON

	Existing	<u>Proposed</u>
Number of Lanes & Lane Width	2@12'	3@12'
Median, Type, & Width	Depressed, Turf, 88' & Var.	Depressed, Turf, 88' & Var.
Shoulder/Width & Type	6' (LT), 10' (RT) stabilized	10' stabilized (LT & RT)
Curb & Gutter/Type	None	None
Roadway Width	2@42'	2@56'
Right-of-Way	Varies 240'-380'	Varies 240'-380'
Design Speed – Horizontal	70 mph	70 mph
Design Speed – Vertical	70 mph	70 mph
Posted Speed	65 mph/Trucks 55 mph	65 mph/Trucks 55 mph
Parking	None	None
Sidewalks	None	None
TRAFFIC		

Existing ADT 28,000 Projected ADT 40,200 2003 2028

See Appendix A-3

Pavement Surface Condition 9.0 (I-55) ** CRS-20 <u>03</u> Pavement Surface Condition 4.8 (W. Frontage Rd) CRS-20 01

^{**} Note: I-55 was overlaid in 2003

DRAINAGE

Existing Conditions

This location has experienced overtopping flow resulting in road closure twice since the spring of 2001. These events are attributed to floodplain development upstream that have increased runoff. The undersized frontage road bridge just upstream of the interstate structures is also a contributing factor.

Proposed Improvements

The interstate bridges will be reconstructed to provide a larger effective opening for the Brush Creek. This will eliminate the overtopping of the interstate pavement during large storm events. The interstate will also be raised in the vicinity of Brush Creek to match the required elevation of the new 3-lane structures. The existing West Frontage Road bridge will be removed and the area returned to a natural state. The northern portion of the West Frontage Road will connect to II 104 via a new 20 ft wide aggregate roadway. This will ensure access to those properties to the north of Brush Creek. This new facility will require two new culverts. A new median drainage structure will be required on I-55 due to the profile change. Ditches will be regraded as required and two culverts will be extended on I-55.

RIGHT-OF-WAY

Acquisition: Yes X	No	Total Ac	res <u>4.2</u>	22 Estimated C	ost S	\$339,000
Total Parcels <u>3</u>	Res. Parcels	1	Bus. Parce	els <u>2</u> \	/ac. Pa	rcels
Relocation(s)			None			
Permanent Easements:	Yes	No	X	Total Acres	N/	<u>A</u>
Parcels N/A	Estimated Cost	\$0		Type/Use of F	Prop.	N/A
Temporary Easements:	Yes X	No _		Total Acres	2.44	
Parcels 4	Estimated Co	ost <u>\$11</u>	,000	Type/Use of P	rop	Bus/Res

CTDII	ctidec/c		ARATIONS
		RUIE SEP	

None Involved

LOCATION: SN 084-0107 (I-55 Northbound over Brush Creek)

Description/Existing Conditions

The northbound section of the twin structures, constructed in 1972, is a three span steel continuous multi-beam structure with open stub abutments. It has an overall length of 159.7 ft, measured from back to back of abutments, and a measured bridge roadway width of 40.5 ft. The skew angle is 39°55'00" right. It carries FAI 55 northbound over Brush Creek.

Proposed Improvement

The existing structure will be removed and replaced with a new structure that is three lanes wide plus shoulders. This new structure will be above the high water elevation. It will have an overall length of 185 ft, measured from back to back of abutments, and a measured bridge roadway width of 56 ft. The skew angle will be 40°00'00" right forward.

LOCATION: SN 084-0108 (I-55 Southbound over Brush Creek)

Description/Existing Conditions

The southbound section of the twin structures, constructed in 1972, is a three span steel continuous multi-beam structure with open stub abutments. It has an overall length of 159.7 ft, measured from back to back of abutments, and a measured bridge roadway width of 40.5 ft. The skew angle is 39°55'00" right. It carries FAI 55 southbound over Brush Creek.

Proposed Improvement

The existing structure will be removed and replaced with a new structure that is three lanes wide plus shoulders. This new structure will be above the high water elevation. It will have an overall length of 185 ft, measured from back to back of abutments, and a measured bridge roadway width of 56 ft. The skew angle will be 40°00'00" right forward.

LOCATION: SN 084-0002 (West Frontage Road over Brush Creek)

Description/Existing Conditions

The structure, constructed in 1949, is a single span steel multi-beam structure. It has an overall length of 73.0 ft measured from back to back of abutments, and a measured bridge roadway width of 39.7 ft. The skew angle is 39°55'00" right forward. It carries I-55 West Frontage road (SN 084-0002) over Brush Creek.

Proposed Improvement

The existing structure will be removed and the site will be graded to match the existing channel. A relocated Frontage road will service the properties affected by the bridge removal.

Location:				
Railroad(s):			No. of Tracks	
	Exis	sting	Proposed	
None				
Cross Buck Signs				
Flashing Light Signals				
Cantilever Signals				
Gates				
Remarks:				
Directional Separation				
	Existing	<u>Width</u>	Proposed	<u>Width</u>
Yellow Double Center Line				
Painted Median				
Mounted Median				
Barrier Median				
Remarks:				

None Involved X

AT-GRADE RAILROAD CROSSINGS

OTHER IMPROVEMENT CONSIDERATIONS	None Involved
Traffic Signal Modernization/Installation	
None	
Parking/Sidewalks	
None	
Truck Routes	
I-55 is a Class I truck route.	
Lighting	
None	
Landscaping/Roadside Development	
Disturbed areas will be returned to their natural state. An II and included in the construction plans.	erosion control plan will be prepared in Phase
Mail Drop-Off	

None

OTHER IMPROVEMENT CONSIDERATIONS

None Involved

Utilities

Ameren CIPS Gas
Ameren CIPS Electric
Insight Communications Cable TV

McLeod USA Communications
Verizon North, Inc. Fiber Optic
City of Divernon Water/Sewer
360 Networks Fiber Optic
Wiltel Communications Communications

Pedestrian Overpass/Subways/Facilities

None

Bikeways/Bikeroutes

Bicycles are not permitted on the Interstate system and are excluded in accordance with Section 17-1.02 of the BDE Manual.

Mass Transportation

None

Other

None

DESIGN CRITERIA UTILIZED X Reconstruction Rural _____ Urban ____ Classification Interstate Highway Type Interstate "3R" Guidelines Current ADT (Year) Others _____ Geometrics: X In Compliance In Compliance with Exceptions as Noted Below

DESIGN CRITERIA UTILIZED

Structures:		None Involved
	X	In Compliance
		In Compliance with Exceptions as Noted Above
<u>Justification</u>		
Mailbox		
Mountings:	X	None Involved
		In Compliance (Policy 10/01/77)
		In Compliance with Exceptions as Noted Above

COST ESTIMATE FOR PROJECT REPORT

Code No.	Item Description	Units		Quantity			Unit Cost		Total Cost
	·		Roadway	Structure	Total				
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	810		810	\$	18.00	\$	14,580.00
20200100	EARTH EXCAVATION	CU YD	7,534		7,534	\$	17.00	\$	128,078.00
20400800	FURNISHED EXCAVATION	CU YD	39,318		39,318	\$	25.00	\$	982,950.00
20700110	POROUS GRANULAR EMBANKMENT	CU YD		472	472	\$	30.00	\$	14,160.00
25000200	SEEDING, CLASS 2	ACRE	17		17	\$	500.00	\$	8,500.00
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	1,530		1,530	\$	1.00	\$	1,530.00
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	1,530		1,530	\$	1.00	\$	1,530.00
25000600 25000700	POTASSIUM FERTILIZER NUTRIENT AGRICULTURAL GROUND LIMESTONE	POUND TON	1,530 34		1,530 34	\$	1.00 45.00	\$	1,530.00
25000700	TEMPORARY SEEDING	ACRE	5		5	\$	500.00	\$	1,530.00 2,500.00
25100115	MULCH, METHOD 2	ACRE	17		17	\$	500.00	\$	8,500.00
28000300	TEMPORARY DITCH CHECKS	EACH	55		55	\$	125.00	\$	6,875.00
28000300	PERIMETER EROSION BARRIER	FOOT	6,800		6,800	\$	3.00	\$	20,400.00
28000500	INLET AND PIPE PROTECTION	EACH	16		16	\$	120.00	\$	1,920.00
28100107	STONE RIPRAP, CLASS A4	SQ YD	2.150		2.150	\$	60.00	\$	129.000.00
28200100	FILTER FABRIC FOR USE WITH RIPRAP	SQ YD	2,150		2,150	\$	2.00	\$	4,300.00
40200700	AGGREGATE SURFACE COURSE, TYPE A 8"	SQ YD	9,862		9,862	\$	16.00	\$	157,792.00
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	782		782	\$	175.00	\$	136,850.00
42001300	PROTECTIVE COAT	SQ YD	702	1,980	1,980	\$	2.00	\$	3,960.00
42100325	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT, 11 1/4"	SQ YD	38.957	1,000	38,957	\$	60.00	\$	2,337,420.00
44000100	PAVEMENT REMOVAL	SQ YD	14,546		14,546	\$	5.00	\$	72,730.00
44004300	PAVEMENT BREAKING	SQ YD	8,587		8,587	\$	3.00	\$	25,761.00
48100100	AGGREGATE SHOULDERS, TYPE A	TON	1,659		1,659	\$	16.00	\$	26,544.00
50100200	REMOVAL OF EXISTING STRUCTURES	L SUM	1,000	3	3	\$	35,000.00	\$	105,000.00
50105220	PIPE CULVERT REMOVAL	FOOT	43		43	\$	10.50	\$	451.50
50200100	STRUCTURE EXCAVATION	CU YD	_	792	792	\$	20.00	\$	15,840.00
50300225	CONCRETE STRUCTURES	CU YD		524	524	\$	600.00	\$	314,400.00
50300255	CONCRETE SUPERSTRUCTURE	CU YD		572	572	\$	700.00	\$	400,400.00
50300260	BRIDGE DECK GROOVING	SQ YD		1,510	1,510	\$	10.00	\$	15,100.00
50300310	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH		16	16	\$	600.00	\$	9,600.00
50300320	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH		8	8	\$	600.00	\$	4,800.00
50400905	FURN & ERECT PRECAST PRESTRESSED CONC - I-BEAMS, 42"	FT		2,160	2,160	\$	90.00	\$	194,400.00
50800105	REINFORCEMENT BARS, EPOXY COATED	LB		182,800	182,800	\$	1.00	\$	182,800.00
51201610	FURNISHING STEEL PILES HP12X63	FOOT		2,536	2,536	\$	40.00	\$	101,440.00
51202700	DRIVING STEEL PILES	FT		2,536	2,536	\$	25.00	\$	63,400.00
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1		1	\$	500.00	\$	500.00
54214293	END SECTIONS, EQUIVALENT ROUND-SIZE 18"	EACH	2		2	\$	300.00	\$	600.00
54214299	END SECTIONS, EQUIVALENT ROUND-SIZE 24"	EACH	2		2	\$	315.00	\$	630.00
54248515	CONCRETE COLLAR	EACH	2		2	\$	900.00	\$	1,800.00
58700200	BRIDGE SEAT SEALER	SQ FT		620	620	\$	4.00	\$	2,480.00
60107600	PIPE UNDERDRAINS 4"	FOOT	10,589		10,589	\$	6.80	\$	72,005.20
60267155	FLUSH INLET BOX FOR MEDIAN (542546) TO BE RECONSTRUCTED	EACH	1		1	\$	1,100.00	\$	1,100.00
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	1,075		1,075	\$	13.00	\$	13,975.00
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4		4	\$	1,800.00	\$	7,200.00
63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	EACH	4		4	\$	2,000.00	\$	8,000.00
63200310	GUARDRAIL REMOVAL	FOOT	1,826		1,826	\$	4.50	\$	8,217.00
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	24		24	\$	700.00	\$	16,800.00
67000600	ENGINEER'S FIELD LABORATORY	CAL MO	24		24	\$	600.00	\$	14,400.00
67100100	MOBILIZATION	L SUM	1		1	\$	30,000.00	\$	30,000.00
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1		1	\$	50,000.00	\$	50,000.00
70300625	TEMPORARY PAINT PAVEMENT MARKING LINE 4"	FOOT	12,710		12,710	\$	0.10	\$	1,271.00
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,500		1,500	\$	20.00	\$	30,000.00
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,500		1,500	\$	5.00	\$	7,500.00
78007110	PERMANENT PAVEMENT MARKING - LINE 4"	FOOT	16,526	ļ	16,526	\$	1.00	\$	16,526.00
542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	26		26	\$	50.00	\$	1,300.00
542C5473	PIPE CULVERTS, CLASS C, TYPE 1 EQUIVALENT ROUND-SIZE 18"	FOOT	38		38	\$	25.00	\$	950.00
542C5479	PIPE CULVERTS, CLASS C, TYPE 1 EQUIVALENT ROUND-SIZE 24"	FOOT	40 39.057		40	\$	30.00	\$	1,200.00
LR355313 X4066434	BITUMINOUS AGGREGATE MIXTURE BASE COURSE 4"	SQ YD TON	38,957		38,957 500	\$	15.00 45.00	\$	584,355.00
LR355329	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "E", NE BITUMINOUS AGGREGATE MIXTURE BASE COURSE 8"	SQ YD	500		4,510	\$	45.00 25.00	\$	22,500.00 112,750.00
X0323558	BRIDGE JOINT SYSTEM (EXPANSION) 1 5/8"	FOOT	4,510	226	4,510 226	\$	40.00	\$	9,040.00
			1	220	220		40.00	···	5.040.00

Note: Contract plans assumed to be prepared by Consultant
Base Year - 2004

SUBTOTAL	\$ 6,511,670.70
MISCELLANEOUS (15%)	\$ 976,750.61
2004 TOTAL	\$ 7,488,421.31
2009 TOTAL (@3.75%/year)	\$ 9,001,829.80

PE II cost \$ 1,000,000.00
Right-of-Way Cost \$ 350,000.00
Utility Cost \$ 50,000.00
TOTAL ESTIMATED COST \$ 10,401,829.80

Accident Problems at Intersections(s) Wet Condition Night Condition

ACCIDENT ANALYSIS RATED HIGH ACCIDENT LOCATIONS None Involved

X

TREE REMOVAL / REPLACEMENT

Some tree removal will be required in the vicinity of the interstate structures over Brush Creek due to the expansion of the toe of slopes to raise the profile of Interstate 55. A detailed tree survey will be performed in Phase II.

COMMITMENTS

	COMMITMENTS			COMMITMENT COMPLETED			
BC INIT.	DATE MADE	COMMITMENT MADE	DATE	INIT.			